

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Clifford M. Bryant et al.

Application No.: Not Yet Assigned

Filed: Herewith

For: NOVEL COMPOUNDS AND
COMPOSITIONS AS PROTEASE
INHIBITORS

Customer No. 20350

Examiner:

Art Unit:

INFORMATION DISCLOSURE
STATEMENT UNDER 37 CFR §1.97 and
§1.98

Mail Stop: Patent Application
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Sir:

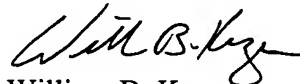
The references cited on attached forms PTO-1449s and PTO-892 are being called to the attention of the Examiner. In accordance with 37 CFR §1.98(d), copies of the references can be found in Application No. 10/205,600, filed July 24, 2002 (Attorney Docket No. 015058-003010US) and Application No. 09/526,090, filed March 15, 2000 (now Pat. No. 6,455,502) (Attorney Docket No. 015058-003000US). It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement.

However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



William B. Kezer
Reg. No. 37,369

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Substitute for form 1448A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete If Known	
				Application Number	Not Yet Assigned
				Filing Date	Herewith
				First Named Inventor	Bryant, Clifford M.
				Group Art Unit	
				Examiner Name	
Sheet	1	of	3	Attorney Docket Number	015058-003011US

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
	AA	JP	S39-26878		Inkura	05/06/67		
	AB	PC	WO 00/51998		Cwyn et al.	09/08/00		
	AC	PC	WO 00/55124		Buyse et al.	09/21/00		
	AD	PC	WO 01/58886	A1	Missbach	08/16/01		
	AE	PC	WO 01/55125	A1	Bózsing et al.	08/02/01		
	AF	PC	WO 95/24382		Hallinan et al.	09/14/95		
	AG	PC	WO 95/15309		Jenkins et al.	06/08/95		
	AH	PC	WO 90/13561		Barrett et al.	11/15/90		
	AI	PC	WO 85/13069		Morriello et al.	05/18/95		
	AJ	PC	WO 98/08867		Sugawara	03/05/98		
	AK	EP	0 355 572		Stüber	02/28/90		
	AL	EP	0 536 399		Okubo et al.	04/14/93		
	AM	EP	0 419 683		Uchida et al.	04/03/91		
	AN	EP	0 754 454		Tanaka et al.	01/22/97		

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¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	Not Yet Assigned
		Filing Date	Herewith
		First Named Inventor	Bryant, Clifford M.
		Group Art Unit	
		Examiner Name	
Sheet 2 of 3	Attorney Docket Number	015058-003011US	

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	AO	Ashworth, et al. "4-Cyanothiazolidides as very potent, stable inhibitors of dipeptidyl peptidase IV," <u>Bioorganic & Med. Chem. Letters</u> , B,Oxford, 6(22):2745-2748 (1996).	
	AP	Bergeman, Marco et al., "Studies on the reactivity of .alpha.-cyano.alpha.-isocyano alkanoates. Versatile synthons for the assembly of imidazoles," <u>Helv. Chim. ACTA</u> , 82(6):909-918 (1999).	
	AQ	Dufour et al. "Engineering nitrile hydratase activity into a cysteine protease by a single mutation," <u>Biochemistry, US. Am. Chem. Soc.</u> , Easton, PA, 34(50):16382-16388 (1995).	
	AR	Gour-Salin et al. "Inhibition of papain by peptide nitriles: conversion of the nitrile group into other functionalities via the papain:nitrile thiomidate ester adduct," <u>Can. J. of Chem.</u> CA, National Research Council. Ottawa, 69(8):1288-1297 (1991).	
	AS	Li, et al. "Aminoacylpyrrolidine-2-nitriles: Potent and stable inhibitors of dipeptidyl-peptidase IV (CD 26)," <u>Archives of Biochem. and Bioph.</u> , 323(1)148-154 (1995).	
	AT	Katritzky, et al. "Benzotriazole-assisted synthesis of alpha.-(acylamino) nitrites and a conceptually novel method for peptide elongation," <u>J. Chem. Soc., Perkin Trans.</u> 1(7):1853-1857 (1990).	
	AU	Lipshutz, et al. "Chiral induction in originally racemic amino acids via 5-acyl and 5-acyloxyaminooxazoles," <u>Isr. J. Chem.</u> 27(1):49-55 (1986), abstract.	
	AV	Lipshutz, et al. "Heterocycles as masked diamide/dipeptide equivalents. Formation and reactions of substituted 5-(acylamino)oxazoles as intermediates en route to the cyclopeptide alkaloids," <u>J. Am. Chem. Soc.</u> , 105(26):7703-7713 (1983).	
	AW	Lipshutz, et al. "Oxazolophanes as masked cyclopeptide alkaloid equivalents: cyclic peptide chemistry without peptide couplings," <u>J. Am. Chem. Soc.</u> , 112(19):7032-7041 (1990).	
	AX	Mcmath, et al. "Direct dialkylation of peptide nitriles. Application of the synthesis of 1-aminocyclopropane-1-carboxylic acid (Acc)-containing dipeptides," <u>Bull. Soc. Chim. Fr.</u> 134(1):105-110 (1997).	
	AY	Moser et al. "130 Poly (dipeptamidinium)-Salze: definition und metoden zur preparativen herstellung. poly (dipeptamidinium) salts: definition and methods of preperation," <u>Helvetica Chimica ACTA</u> , CH, Verlag, Basel 69:1224-1262 (1986).	
	AZ	North et al. "Synthetic studies towards cyclic peptides. Concise synthesis of thiazoline and thiazole containing amino acids," <u>Tetrahedron</u> , 46(24):8267-8290 (1990).	

Examiner Signature	Date Considered
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Applicati n Number	Not Yet Assigned
		Filing Date	Herewith
		First Named Invent r	Bryant, Clifford M.
		Group Art Unit	
		Examiner Name	
Sheet 3 of 3	Attorney Docket Number	015058-003011US	

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS); title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	BA	Nippon, K., "Patent Abstracts of Japan," Publication No. 63301868, 013(137)(1988), abstract.	
	BB	Thompson et al. "Carboxyl-modified amino acids and peptides as protease inhibitors," <u>J. Med. Chem.</u> , 29(1):104-111 (1986).	
	BC	Vargha, Eugen: "Peptide derivatives. VI. N-protected di- and tripeptide nitriles," <u>Stud. Univ. Babes-Bolyai, Ser. Chem.</u> , 13(2):31-5 (English astract of article in Romanian) (1968).	
	BD	Varughese "The structure and resonance Raman spectra - structure correlations for methyloxycarbonyl-L-phenylalanyl-L-alanine ethyl dithioester," <u>Can. J. Chem.</u> , 64(8):1668-1673 (1986).	
	BE	Yamada, et al. "Studies of unusual amino acids and their peptides. IX. The synthetic study of bottromycins B1 and B2," <u>Bul. Chem. Soc., Jpn.</u> 51(3):878-83 (1978), abstract.	

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			Application Number	Not Yet Assigned	
			Filing Date	Herewith	
			First Named Inventor		
			Group Art Unit		
			Examiner Name		
Sheet	1	of	1	Attorney Docket Number	015058-003011US

U.S. PATENT DOCUMENTS						
Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
	1	09/526,485		Bryant et al.		

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	2	EP	WO 00/49007					<input type="checkbox"/>
	3	EP	WO 00/49008					<input type="checkbox"/>
	4	EP	WO 01/30772 A1					<input type="checkbox"/>
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		U.S. Patent Application S.N. 09/526,485, Bryant et al., filed 3/15/2000.	<input type="checkbox"/>
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FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)			Attorney Docket No.: 015058-003011JS		Applicant: Clifford M. Bryant, et al.	
			Filing Date: Herewith		Group:	
Reference Designation			U.S. PATENT DOCUMENTS			Page 1
Examiner Initial	Document No.	Date	Name	Class	Sub-class	Filing Date (If Appropriate)
FOREIGN PATENT DOCUMENTS						
	Document No.	Date	Country	Class	Sub-class	Translation (Yes/No)
AA	JP 63 301868	12/8/88	Japan			abstract only
AB	WO 98 01133	01/15/98				abstract only
AC	WO 99 24460	05/20/99				yes
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)						
AD	Hanzlik, Robert P. et al.: "Reversible covalent binding of peptide nitriles to papain" Biochim. Biophys. Acta, vol. 1035, no. 1, 1990, pages 62-70					
AE	Suzue, Seigo et al.: "Hepatic agents. I. Synthesis of aminocyl (and hydroxyacyl) aminoacetonitriles" [translated abstract], Chem and Pharm. Bull. (Tokyo) (1968), 16(8), 1417-32					
EXAMINER			DATE CONSIDERED			

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FORM PTO-1449 (Modified)			Attorney Docket No.: 015058-003011US		Application No.:	
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)			Applicant: Clifford M. Bryant, et al.			
			Filing Date: Herewith		Group:	
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FOREIGN PATENT DOCUMENTS						
	Document No.	Date	Country	Class	Sub-class	Translation (Yes/No)
AA	JP 42009133	05/06/67	Japan			no
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)						
EXAMINER			DATE CONSIDERED			

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Notice of References Cited	Application/Control No.	Applicant(s)/Patent Under Reexamination BRYANT ET AL.	
	Examiner	Art Unit	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,455,502-B1	09-2002	Bryant et al	514/19
*	B	US-6,476,026-B1	11-2002	Bryant et al	514/235.8
*	C	US-6,593,327-B2	07-2003	Bryant et al	514/235.8
*	D	US-2003/0119788-A1	06-2003	Bryant et al	514/114
*	E	US-6,492,362-B1	12-2002	Graupe et al	514/237.5
	F	US-6,395,897-B1	05-2002	Cywin et al	544/163
*	G	US-4,927,809	05-1990	Stuber et al	514/20
	H	US-			
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FOREIGN PATENT DOCUMENTS

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	N					
	O					
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	S					
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NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
*	U	Picken et al. Inhibition of bovine cathepsin B... Biochem. Soc. Trans. April 1990, Vol. 18, Part 2, page 316.
	V	
	W	
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